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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/525,931	02/25/2005	Koro Uenishi	0388-050238	2817

28289 7590 08/14/2006

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EXAMINER

LAU, TUNG S

ART UNIT	PAPER NUMBER
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2863

DATE MAILED: 08/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/525,931

Applicant(s)

UENISHI ET AL.

Examiner

Tung S. Lau

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>See Office Action</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Arrangement of the Specification

1. As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

(a) TITLE OF THE INVENTION.

(b) CROSS-REFERENCE TO RELATED APPLICATIONS.

(c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR
DEVELOPMENT.

(d) THE NAMES OF THE PARTIES TO A AGREEMENT

(e) INCORPORATION-BY-REFERENCE OF JOINT RESEARCH MATERIAL

SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or

REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a).

"Microfiche Appendices" were accepted by the Office until March 1, 2001.)

(f) BACKGROUND OF THE INVENTION.

(1) Field of the Invention.

(2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.

(g) BRIEF SUMMARY OF THE INVENTION.

(h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).

(i) DETAILED DESCRIPTION OF THE INVENTION.

(j) CLAIM OR CLAIMS (commencing on a separate sheet).

(k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).

(l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A

“Sequence Listing” is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required “Sequence Listing” is not submitted as an electronic document on compact disc).

Preliminary amendment

2. Preliminary amendment filed on 02/25/2005 in the file is noted by the examiner.

Drawings Objection

3. The drawings are objected to under 37 CFR 1.84 (o)(n) which requires legends on drawings in figures 1, 2, 4 the generic blocks 9, 10, 174, 5, 11, 14, 13, 12, 3a, 3b, 3c, 2c, 2b, 2a, 3d, 3e, 3f, 3g, 2f, 2e, 2d. Should be provided with descriptive labels (e.g. software protocol, transmitter, frequency hopper, receiver, etc), correction is required.

Specification objections

4. The abstract of the disclosure is objected to because it contains the title of the invention. The heading on the abstract should only read 'Abstract' or 'Abstract of the Disclosure'. Correction is required. See MPEP 608.01(b).

Applicant is reminded of the proper language and format for an abstract of the disclosure. The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. See 37 CFR 1.72(b) and MPEP § 608.01(b). The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," "means" and "said," etc, should be avoided

Joint inventor

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered

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therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 C.F.R. 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Information Disclosure Statement

6. Information Disclosure Statement filed on 03/02/2006 is acknowledged by the examiner; A copy of a signed PTO-1449 attached with this office action.

The Information Disclosure Statement filed on 02/28/2006 does not belong to this case, it belong to 10/518,149 (the contains of the Foreign Patent documents show (JP 01 048357, JP 04 213309 and WO 97/26387) do not belong to this case), the examiner believe is an error on the part of the applicant (See IDS filed on 02/28/2006), The applicant should submitted the IDS to the corresponding file application.

Applicant is advised that the date of any resubmission of any item of information contained in this information disclosure statement or the submission of any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the statement, including all certification requirements for statements under 37 CFR 1.97(e). See MPEP § 609 C(1).

Foreign priority

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7. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d) or (f), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 101

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 101 that form the basis for the rejections under this section made in this Office action:

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 7-10 and 12-15 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

In claims 7-10, a vehicle driver's fatigue evaluating method for quantitatively calculating a degree of fatigue of a driver seated on a seat based on an amount of rearward deflection of a lower part of a backrest portion of the seat, a load applied downward to a front part of a seating portion of the seat, and a load applied rearward to an upper part of the backrest portion, in a state of the driver being seated on the seat. Claims 12-15, a vehicle seat evaluating method for evaluating a seat with a degree of fatigue calculated by a vehicle driver's fatigue evaluating method for quantitatively calculating a degree of 'fatigue of a driver seated on the seat based on an amount of rearward deflection of a lower part of a backrest portion of the seat, a load applied downward to a front part of a seating portion of the seat, and a load applied rearward to an upper part of the backrest portion, in a state of the driver being seated.

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These claims appear to merely describe mathematical transformation and lack of concrete and tangible result. The practical application of the claimed invention cannot be realized until the information determined is conveyed to the user. For the result to be tangible it would need to output to a user or stored for later use. Hence the claims are treated as nonstatutory functional descriptive material (See MPEP § 2106 and OG Notices: 22 November 2005, Guidelines for Subject Matter Eligibility,

<http://www.uspto.gov/web/offices/com/sol/og/2005/week47/og200547.htm>).

The claimed invention as a whole must accomplish a practical application. That is, it must produce a “useful, concrete and tangible result.” State Street, 149 F.3d at 1373, 47 USPQ2d at 1601-02, (“the transformation of data, representing discrete dollar amounts, by a machine through a series of mathematical calculations into a final share price, constitutes a practical application of a mathematical algorithm, formula, or calculation, because it produces ‘a useful, concrete and tangible result’ – a final share price momentarily fixed for recording and reporting purposes and even accepted and relied upon by regulatory authorities and in subsequent trades.”).

The purpose of this requirement is to limit patent protection to inventions that possess a certain level of “real world” value, as opposed to subject matter that represents nothing more than an idea or concept, or is simply a starting point for future investigation or research (Brenner v. Manson, 383 U.S. 519, 528-36, 148

USPQ 689, 693-96); *In re Ziegler*, 992, F.2d 1197, 1200-03, 26 USPQ2d 1600, 1603-06 (Fed. Cir. 1993)).

A process that consists solely of the manipulation of an abstract idea is not concrete or tangible. See *In re Warmerdam*, 33 F.3d 1354, 1360, 31 USPQ2d 1754, 1759 (Fed. Cir. 1994). See also *Schrader*, 22 F.3d at 295, 30 USPQ2d at 1459. Nor can one patent "a novel and useful mathematical formula," *Flook*, 437 U.S. at 585, 198 USPQ at 195; electromagnetism or steam power, *O'Reilly v. Morse*, 56 U.S. (15 How.) 62, 113-114 (1853). Claims that recite nothing but the physical characteristics of a form of energy, such as a frequency, voltage, or the strength of a magnetic field, define energy or magnetism, per se, and as such are nonstatutory natural phenomena. *O'Reilly*, 56 U.S. (15 How.) at 112-14.

The Federal Circuit held that the mere manipulations of abstract ideas are not patentable. *Schrader*, 22 F.3d at 292-93, 30 USPQ2d at 1457-58. If a claimed process manipulates only numbers, abstract concepts or ideas, or signals representing any of the foregoing, the claim is not being applied to appropriate subject matter. *Schrader*, 22 F.3d at 294-95, 30 USPQ2d at 1458-59. The Federal Circuit also recognizes that the fact that a nonstatutory method is carried out on a programmed computer does not make the process claim statutory. *Grams*, 888 F.2d at 841, 12 USPQ2d at 1829 (claim 16 ruled nonstatutory even though it was a computer- implemented process). (See MPEP § 2106 and OG

Notices: 22 November 2005, Guidelines for Subject Matter Eligibility,

<http://www.uspto.gov/web/offices/com/sol/og/2005/week47/og200547.htm>).

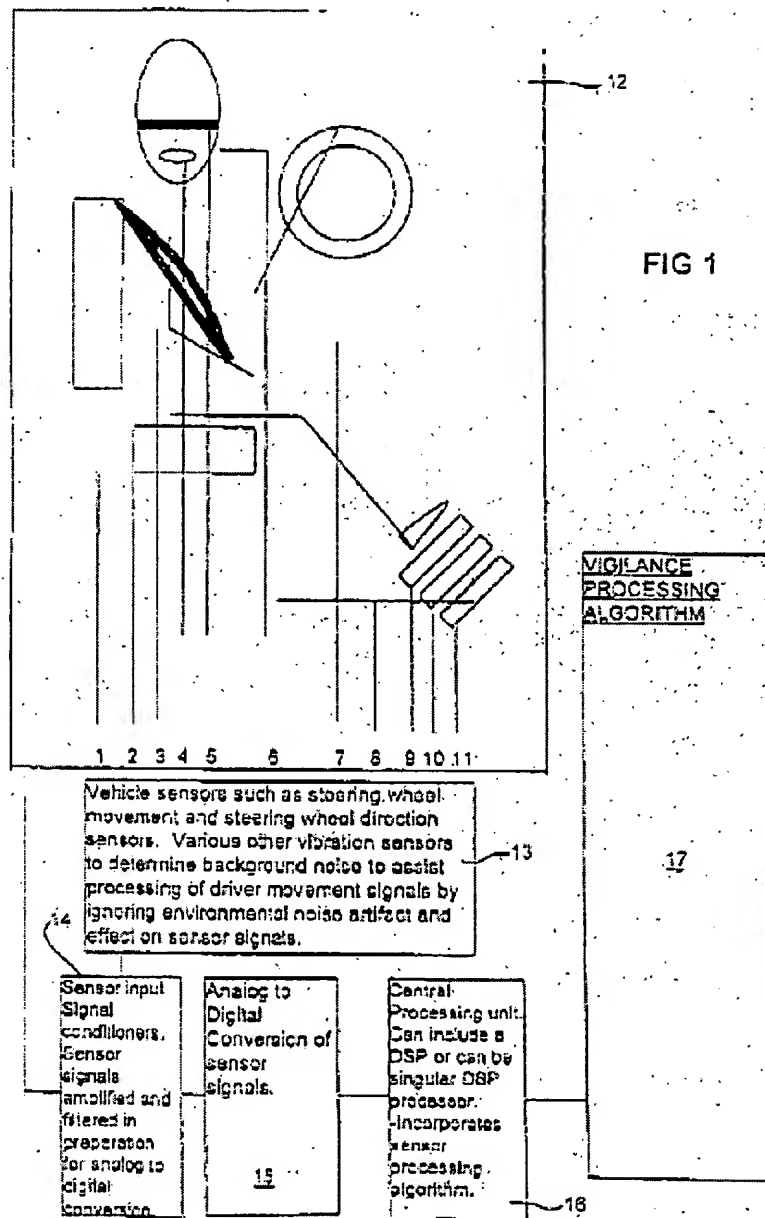
Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 7, 11, 12, 8 and 13 are rejected under 35 U.S.C. 102(e) as being anticipated by Burton (U.S. Patent Application Publication 2004/0044293, Continuation filed on Jul. 26, 2001).



Regarding claim 7:

Burton discloses a vehicle driver's fatigue evaluating (fig. 1, unit 17) method for quantitatively calculating a degree of fatigue (fig. 1, unit 13, 17) of a driver seated on a seat based (page 1, section 0004) on an amount of rearward deflection of a lower part of a backrest portion of the seat (page 1, section 0004, 0008), a load

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applied downward to a front part of a seating portion of the seat (page 1, section 0008, page 2, section 0026, page 3, section 0035), and a load applied rearward to an upper part of the backrest portion (page 6, section 0099-0111), in a state of the driver being seated on the seat (page 6, section 0099-0112).

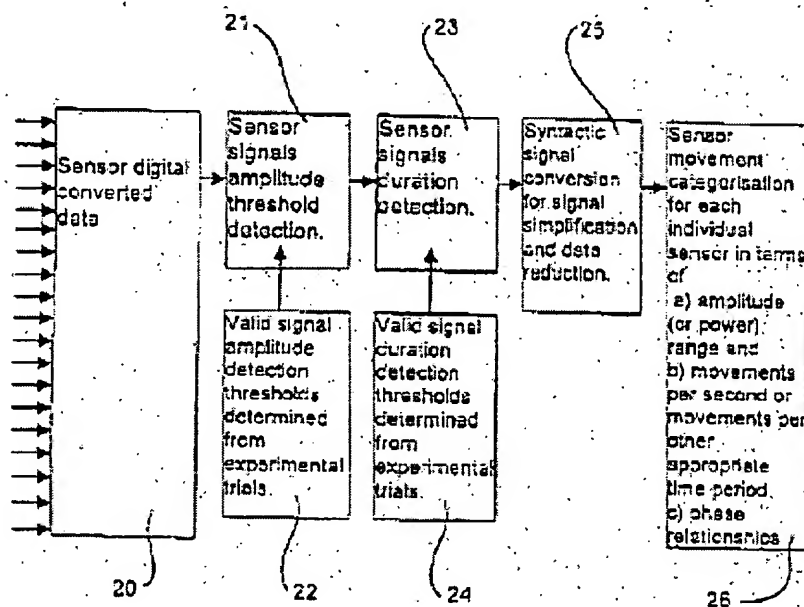


FIG 2

Regarding claim 11:

Burton discloses a vehicle seat evaluating apparatus (fig. 1, unit 17) comprising: a first detecting device for detecting an amount of rearward deflection of a lower part of a backrest portion of a seat (page 6, section 0099, 00104) a second detecting device for detecting a load applied downward to a front part of a seating portion of the seat (page 6, section 0012), and a third detecting device for detecting a load applied rearward to an upper part of the backrest portion (page 6, 0122, fig. 13), in a state of the driver being seated on the seat (page 4-5,

section 0068); a calculating device for quantitatively calculating a degree of fatigue of the driver seated on the seat based on detection values of said first, second and third detecting devices (fig. 1, unit 17); and an evaluating device for evaluating the seat by the degree of fatigue calculated by said calculating device (fig. 2, unit 26, fig. 3a, unit 30-34).

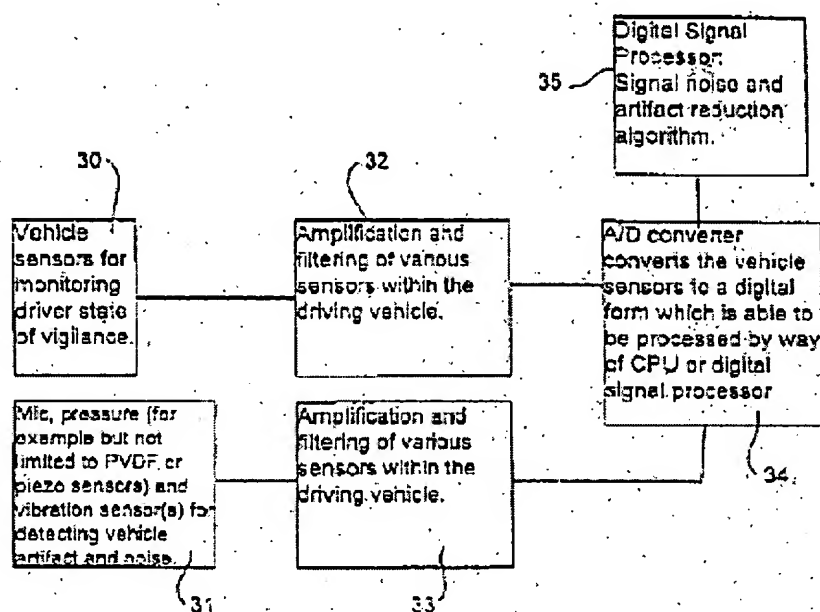


FIG 3A

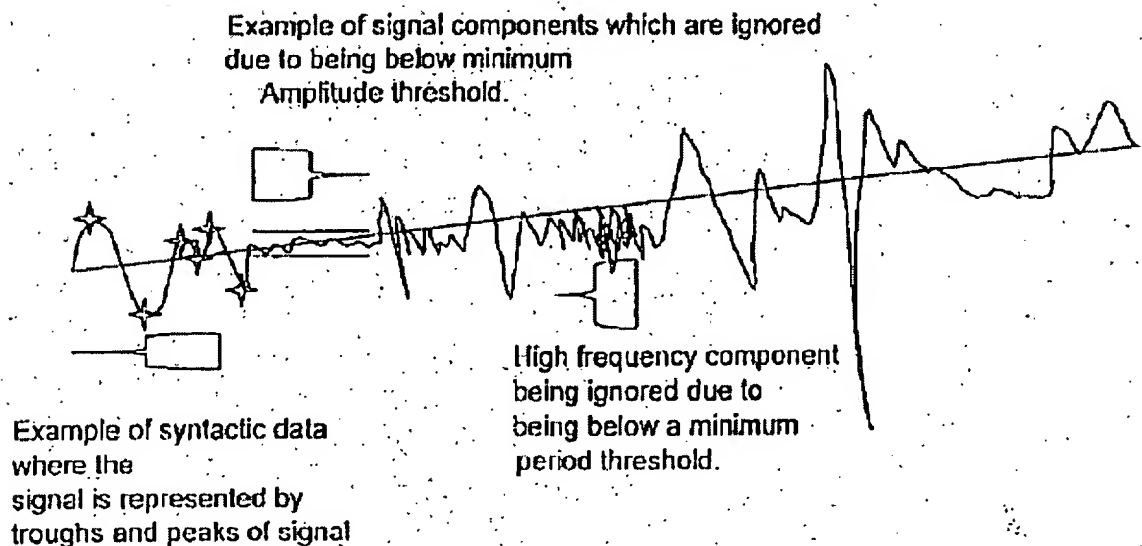
Regarding claim 12:

Burton discloses a vehicle seat evaluating method for evaluating a seat with a degree of fatigue calculated by a vehicle driver's fatigue evaluating method (abstract, fig. 1, unit 17) for quantitatively calculating a degree of fatigue of a driver seated on the seat based on an amount of rearward deflection of a lower part of a backrest portion of the seat (page 6, section 0099, 0104), a load applied downward to a front part of a seating portion of the seat (page 6, section 0099,

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0104), and a load applied rearward to an upper part of the backrest portion (page 6, section 0100-0103), in a state of the driver being seated (page 6, section 0099-0112).

Regarding claim 8, Burton discloses the degree of fatigue of the driver seated on the seat (page 6, section 0099, 0100-0110) is calculated quantitatively (page 4, section 0050) by using an operational expression determined by a statistical technique (page 7, section 0164).

FIG 4B

Regarding claim 13, Burton discloses the degree of fatigue of the driver seated on the seat (page 6, section 0099, 0100-0110) is calculated quantitatively (page

4, section 0050) by using an operational expression determined by a statistical technique (page 7, section 0164).

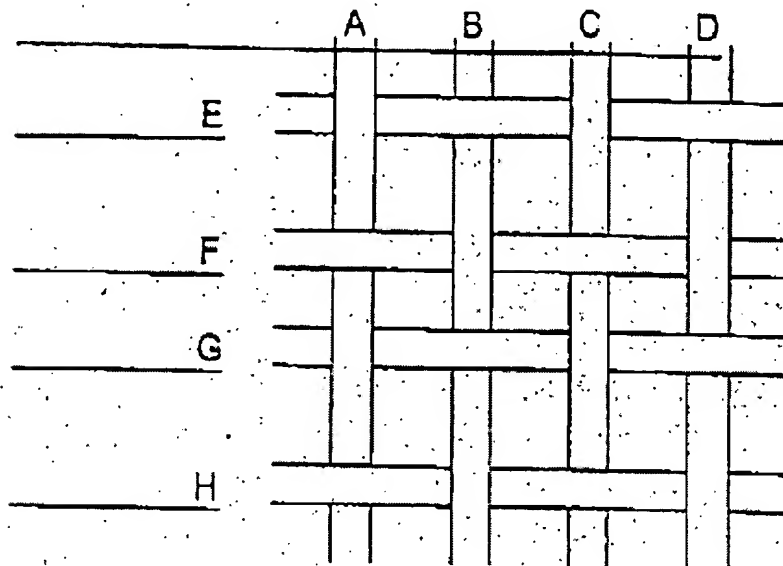


FIG 13

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Smith et al. (U.S. Patent 6,927,694) discloses a monitoring systems, and in particular to systems and methods for using digital cameras that monitor head motion and eye motion with computer vision algorithms for monitoring driver alertness and vigilance for drivers of vehicles, trucks, buses, planes, trains and boats, and operators of stationary and moveable and stationary heavy equipment, from driver fatigue and driver loss of sleep, and

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effects from alcohol and drugs, as well as for monitoring students and employees during educational, training and workstation activities,

Contact information

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tung S Lau whose telephone number is 571-272-2274. The examiner can normally be reached on M-F 9-5:30. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on 571-272-2269. The fax phone numbers for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Tung S. Lau

AU 2863, Patent examiner

July 24, 2006